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Agricultural Memorandum No 682a

Weather and the Febrile Sore Throat

L P Smith

The analysis used the following factors

(a) 60 sets of 4 week morbidity data C_T mean weekly cases per 100,000

(b) Week previous cases as infection factor F

(c) Mean of Kew and Speke 0900 Vapour Pressure over 4 week period starting 7 days previous to the 4 week morbidity data (H).

No immunity factor could be found.

The regression found was:-

$$C_T = 130 + 0.33\,F - 2.88\,H$$

with a multiple correlation of 0.72
and partial regressions 0.50 on F
-0.50 on H.

Tested on 39 independent sets of morbidity data the correlation between actual and estimated values was 0.79.

Dividing the vapour pressure into sets below 9.0 and above 12.0 improved the multiple regression to 0.74, the test producing 0.77.

Any comments or suggestions on this paper should be referred to the author.

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